

WHAT IS

CORE PERFORMANCE®

- In case you are new to **Core Performance™**, the Core Fundamentals are: **Mindset, Nutrition, Movement & Recovery**—the 4 components of an integrated lifestyle system.
- This is not “just another” diet and exercise program or quick fix—it is a system for producing long-term positive changes that will lead to a healthier life.
- These guides will take you step-by-step through the Core Essentials, offering details on each.
- Let's get started healing those aches and pains!

Essential Icons:

MINDSET

RECOVERY

NUTRITION

MOVEMENT

Coaching Tip

Quick Tip

MINDSET

- Forget the traditional mindset of “No Pain, No Gain!” Whether you are striving to make performance gains at the office, at home, or in sports, **do not** accept aches and pains as part of the process.
- Today's hectic lifestyle—and even our conveniences—make us susceptible to aches and pains: long hours at the office or at home hunched over our computers, long commutes to work in the car, and also our growing dependency on quick-and-easy, yet unhealthy, food choices.
- You **must** allow yourself to “recharge your batteries” both mentally and physically. You must take the time to let your body recover from the demands of work, stress, exercise, injury—and life.
- **Take back control!**
 - o The first step is to understand that you are not at the mercy of your body.
 - o Aches and pains can be caused by a variety of things—poor body mechanics and posture, stiff or tight muscles, and even a lack of specific strength and stability in areas of your body that have just “shut off.”
 - o This guide will give you a variety of simple exercises, tips and tools to help you learn how to deal with aches and pains, and prevent them from interfering with your life.

QuickTip: Ridding your body of aches and pains will involve your making a change of some sort—applying proactive strategies, altering daily routines, nutritional habits, posture, or simply giving your body the rest or regeneration time it needs. Use the variety of simple strategies and solutions provided in this guide to help facilitate this change—one pain-free step at a time.


NUTRITION
The Real Comfort Foods

- Poor nutrition habits, combined with heavy training (or, even worse, overtraining) and stress, can lead to inadequate recovery, chronic inflammation and/or injury. These, in turn, can result in aches and pains, which impact your performance. The simple and effective nutritional tips outlined below can help relieve joint pain and muscle soreness, resulting in enhanced recovery, healing and sustainability.
- **ALWAYS check with your doctor before starting any new nutrition or supplement program!**
- **Start with a good food foundation:**
 - o Remember to follow sound foundational nutrition habits [covered in **QuickStudy® Core Performance™ Essentials – Levels 1 & 2**].
 - o Eat plenty of fruits and vegetables—a variety of colors will provide you with powerful phytochemicals and antioxidants.

QuickTip: Eat the rainbow! Grapes, apples, berries, pineapple, papaya, melon, green tea.

o Good-old-fashioned spices not only enhance food flavor but also may help reduce pro-inflammatory chemicals, benefit your immune system and aid in digestion—all of which can positively impact your aches and pains!

QuickTip: Spice up your fuel!

- **Curry** – inflammation control, immune support
- **Garlic** – inflammation control
- **Ginger** – inflammation control, digestive support
- **Hot peppers** – inflammation control, possible pain reliever

Hydration

- Proper hydration not only enhances performance but also helps to ensure adequate blood flow. Adequate blood flow is crucial to delivering essential nutrients to muscles, connective tissue and bones, and also crucial to removing accumulated metabolic waste, which can contribute to aches, pains and inflammation.
- **Good hydration!**
 - o Think before you drink—choose water, green/black/white tea, and other low-calorie natural beverages.
 - o Drink 2 cups of water first thing in the morning.
 - o Take a gallon jug to work to drink throughout the day.
 - o Keep a bottle of water in the car.

QuickTip: Drink ½–1oz of these fluids per pound, per day!



QuickTip: Be prepared and travel like a camel.

• **Practice recovery nutrition.** Much more than post-workout carbohydrate intake, recovery nutrition has 3 stages:

- o Pre-Workout: Helps prevent using muscle for fuel-enhancing performance and recovery.
- o Try a snack or supplement that includes:
 - 5g of protein or amino acids and 15–30g of easily digested carbohydrate.
 - Specific amino acids (BCAAs, arginine, glutamine, HMB, taurine) may enhance recovery.
- During Workout: Providing working muscles with quick fuel and fluid will enhance your performance and recovery.



QuickTip: Drink 7–10oz of fluid every 10–15 minutes; for heavy and intense workouts and/or workouts in extreme temperatures, incorporate a sports drink that includes carbohydrate (14g/8oz) and electrolytes (110–200mg sodium/8oz).

- Post-Workout: After physical activity, your body craves proper nutrients. If they are not provided, instead of recovering, muscle soreness and fatigue result.



QuickTip: A combination of carbohydrate and protein is needed to refuel, rebuild and repair muscle after a training session. **Do not skip the post-workout recovery!**

- Recovery Ratios: Carbohydrate & Protein (typically, 20–35g of protein)
- **very hard workout** – 3:1 carb-to-protein ratio
- **moderate workout** – 2:1 carb-to-protein ratio
- **very easy workout** – 1:1 carb-to-protein ratio

Supplement wisely! Remember, ALWAYS check with your doctor before starting any new nutrition or supplement program!

- **Multi-Vitamin with Antioxidants:** Helps to ensure you are getting all the necessary vitamins and minerals needed to support your body's daily functions. Should include:
 - o 200mg vitamin C
 - o 400IU vitamin E (mixed tocopherol)
 - o 200mcg selenium
 - o Mixed carotenoid (10,000–15,000IU)
 - o Glucosamine/Chondroitin: These natural building blocks for growth, repair and maintenance of cartilage also help cartilage absorb water to keep joints lubricated.
 - Should be pro-vitamin A (beta-carotene), NOT preformed vitamin A (retinol).
 - Should be a mixture of vitamin E (d-alpha tocopherol succinate).
 - Should have at least 50mg of each of the B vitamins, except folic acid (450mcg) and B12 (50mcg).
 - Should have no more than 200–250mg of vitamin C.
 - Should have 400–1000IU of vitamin D.
 - Should have no iron.
- **Glucosamine/Chondroitin:** These natural building blocks for growth, repair and maintenance of cartilage also help cartilage absorb water to keep joints lubricated.
 - o Recommended dosage – 1,500mg/day (divided into 3 dosages of 500mg each).
- **Essential Fatty Acids (EPA/DHA):** These sources of omega-3 fatty acids are usually found in fish oil products.
 - o Omega-3 supplementation has been shown to fight inflammation, lower blood triglyceride (fats that circulate in the blood stream) levels, protect against heart disease and reduce high blood pressure.
 - o Recommended dosage – 3–6g/day (check the label and add the EPA and DHA; you want to have 3–6g of this, not 3–6g of total fish oil per day).
- **Digestive Enzymes:** Use of certain digestive enzymes may help reduce inflammation and increase circulation, both of which may then help improve recovery and reduce the aches and pains associated with heavy training.
 - o Look for protease (enzymes that break down protein) derived from pineapple (bromelain) and papaya (papain). Plant-derived (fungal) enzymes can also be used.
 - o Recommended dosage – 500–1,000 mg/day, taken between meals or pre-/post-workout. Taking these enzymes on an empty stomach allows them to be absorbed into the blood stream to manage inflammation, as opposed to aiding in the digestion of nutrients in the digestive tract.



Prehab

- For those new to **Core Performance™**, **prehabilitation** (“prehab”) refers to exercises that **prevent** the onset of aches, pain and injury.
- **Prehab** exercises **strengthen** the critical muscles of your “**Pillar**”—shoulders, torso, hips—the part of your body from which all movement starts and spreads, making it essential to efficient, pain-free performance.
- **Prehab** exercises engage the muscles that will help **protect, stabilize** and strengthen your **Pillar** so that you are able to safely and effectively move and transfer energy throughout your body—each and every day, wherever you are and whatever you do.
- **Benefits of Prehab**
 - o **protection from pain**—shoulder, lower back, hip and knee
 - o **development of balance, coordination, strength and endurance**—all necessary to function in everyday life

Coaching Tip – Pay Attention to Posture!

Do

- Tighten your tummy by “feeling tall”
- Elevate the sternum up, and let the shoulder blades fall back and down
- Slightly tuck your chin
- Stand tall on your hips

Don't

- Slouch
- Let your shoulders roll forward
- Sit into your hips
- Ignore your posture!

Good Bad



Regeneration: Work + Rest = Success

- For those new to **Core Performance™**, **regeneration** (“regen”) is a lifestyle philosophy, a recognition that you need to plan ways to recover—mentally and physically—in all areas of your life.
- “Regen” is crucial for the body to experience the gains it made by working out.
- It allows us to recharge our batteries and come back invigorated and stronger, ready to perform at even higher levels.

Flexibility – AIS Stretching

- **Equipment – 1 rope:** 8' to 10' long. (Most home-improvement stores will cut a length of rope for a few dollars. Ropes are also available at www.coreperformance.com.)
- **How it relieves aches & pains:** active-isolated stretching (**AIS**) reprograms your muscles to contract and relax through new ranges of motion, working to increase your flexibility.
 - o **AIS** uses **reciprocal inhibition**—as you contract the opposite muscle you are trying to stretch, it will cause the stretched muscle to relax and lengthen.
- **Benefits:** By relieving tension in muscles and balancing the body from head to toe, it allows you to move through a healthy range of motion at each joint, and prevent aches and pains from developing.

Coaching Tips:

- As you stretch the muscle, exhale to release tension and get a deeper stretch.
- Actively move your body through its full range of motion, then give gentle assistance with the rope.
- Hold each stretch for 2 seconds. Relax, and repeat 8 to 10 times.

Tissue Work – Self-Massage with Foam Roll

- **Equipment – 1 roll of tightly packed foam:** 18" long, 5" diameter. Foam Roll available at www.coreperformance.com.)
- **How it relieves aches & pains:** Acts as a deep massage, using deep compression to roll out muscle spasms that develop over time.
- **Benefits:** In addition to allowing the muscles to relax and loosen up, it increases the quality of muscle tissue, relieving aches and pains—and preventing them from recurring. It also gets the blood and lymphatic system flowing.

Coaching Tips:

- Roll over the entire body of the muscle.
- The more uncomfortable it is, the more the muscle needs to be massaged.
- Spend 30–60 seconds on each muscle. Hold on any sore spots you find for an additional 30–60 seconds to release the tissue.

Trigger Point Release – Tennis Ball

- **Equipment – 1 tennis ball**
- **How it relieves aches & pains:** Similar to foam-roll massage, it provides a deep tissue massage, allowing you to pinpoint knots and sore spots, and then release them.
- **Benefits:** Very effective for relieving tension in smaller areas of the body, like the feet. Allows you to focus on specific areas of your body that the foam roll cannot reach effectively. You can do it anywhere.

QuickTip: Keep a tennis ball in your desk at work. Take off your shoes and roll the ball around on your foot (first one, then the other)—a great workday tension reliever!

Flushing the System

- **Examples:** Light bike, walking, hot/cold contrast baths, massage
- **How it relieves aches & pains:** By performing exercises that flush the system of the natural by-products of physical activity, which, in turn, can cause soreness and fatigue.
- **Benefits:** Reduced muscle soreness following activity and increased rejuvenation/re-energization. Also, improves recovery and prepares you for your next bout of activity.

Coaching Tips:

- Roll the tennis ball over the portion of tissue that needs to be released.
- The more uncomfortable it is, the more the muscle needs to be massaged.

PREHAB YOUR PILLAR

• Protect yourself from nagging aches and pains. Strengthen and stabilize your Pillar and begin to move through life pain-free!

1 Pillar Bridge Front
(15-25 sec)



2 Pillar Bridge Lateral
Feet Split (15-25 sec)



3 Glute Bridge Marching



4 Mini Band Internal/External Rotation



5 Four-Way Hip Cable



6 Floor Ys



REGENERATE

• If you're not feeling great – REGENERATE! This routine will sooth the sorest of muscles – leaving your body feeling refreshed and relaxed.

1 Trigger Point Arch Roll



2 Trigger Point Piriformis



3 Trigger Point IT Band with Tennis Ball



4 Trigger Point VMO with Tennis Ball



5 Foam Roll Hamstring



6 Foam Roll Quad/Hip Flexor



7 Foam Roll TFL



8 Foam Roll Mid & Upper Back



9 Flexibility Bent-Leg Hamstring



10 Flexibility Kneeling Quad/Hip Flexor



STRETCH YOUR SORENESS AWAY

• Relieve the tension throughout your body and set your muscles at ease. This routine will help you regain balance throughout and give you the freedom to move pain-free through a full range of motion.

1 Flexibility Gastrocnemius (calf)



2 Flexibility Straight-Leg Hamstring



3 Flexibility Abductor



4 Flexibility Kneeling Quad/Hip Flexor



5 Flexibility Chest Stretch



6 Flexibility Shoulder (side-lying)



7 Flexibility Foam Roll Stretch - Reach, Roll & Lift



LOWER BACK PAIN

• Take back control! This routine will help melt away lower back pain once and for all!

1 Trigger Point
Piriformis



2 Foam Roll
Lower Back & QL



3 Foam Roll
Lat



4 Foam Roll
Hamstring



5 Foam Roll
Quad/Hip Flexor



6 Foam Roll
TFL



7 Flexibility
Kneeling Quad/Hip Flexor



8 Flexibility
Straight-Leg Hamstring



9 Foam Roll Stretch
Reach, Roll & Lift



HIP PAIN

• Don't take another step with hip pain! This routine will help relieve you from the torment of hip pain and put the bounce back in your step.

1 Trigger Point
Piriformis



2 Trigger Point
IT Band with Tennis Ball



3 Foam Roll
Hamstring



4 Foam Roll
TFL



5 Foam Roll
Abductor



6 Foam Roll
Quad/Hip Flexor



7 Flexibility
Abductor



8 Flexibility
Kneeling Quad/Hip Flexor



KNEE PAIN

• Tackle knee pain head-on! This routine will eliminate knee pain from the source, relieving the tension causing the pain and preventing it from returning.

1 Trigger Point
Piriformis



2 Trigger Point
IT Band with Tennis Ball



3 Trigger Point
VMO with Tennis Ball



4 Foam Roll
Quad/Hip Flexor



5 Foam Roll
TFL



6 Foam Roll
VMO



7 AIS
Bent-Leg Hamstring



8 AIS
Abductor



9 AIS
Kneeling Quad/Hip Flexor



Flushing the System

Passive Flush – Hot/Cold Contrast

- Hot/cold-contrast baths and showers are a great way to flush your system.
- If you have access to a hot and cold tub, simply switch back and forth between the two. Otherwise, do the same time periods in the shower, alternating between hot and cold water.

- The change in temperature increases the blood flow, helping to flush your body of any by-products of physical activity.
 - o **hot temperature:** 104°F
 - o **cold temperature:** 55°F
- Start with 3 minutes in the hot, and then go in the cold for 1 minute. Repeat this cycle 3 times, finishing in the cold water.

Active Flush – ESD Light

- Performing light cardio will help increase blood flow, flushing the system.
- Choose a low-impact cardio activity (biking, swimming, elliptical), and perform 15–30 minutes at a medium effort (i.e., where you can talk comfortably during the activity).

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